


Letters to the Editors

Dear Editors,

I am writing to share my experiences with Lyme disease and its treatment. Lyme disease affects 10 to 100 of every 10,000 individuals per year depending on the study and the region. Prompt administration of tetracyclines or lactam antibiotics treats the infection and may halt the associated symptoms. However, during the years, it became apparent that many patients continue to experience lingering neurologic and musculoskeletal symptoms of unknown etiology that have eluded diagnosis and therapy. Repeated courses of antibiotics for prolonged treatment periods have proven to be unsuccessful. The Centers for Disease Control and Prevention has estimated that 10% to 20% may experience “posttreatment Lyme disease (PTLD) syndrome.”

Responses from 2024 patients indicated that it took them visiting at least 7 physicians and more than 10 years before proper diagnosis was made. One study estimated the annual Lyme-associated cost to be approximately 25 million Euros in Germany. Another study compared 52,795 individuals treated for Lyme disease with 263,975 matched controls and found that those with PTLD were associated with $3798 higher total health care costs and 66% more outpatient visits for a 12-month period; the annual cost in the United States was estimated to be more than $1 billion in 2015.

Prominent symptoms in patients with PTLD have included peripheral neuropathy, headaches, chronic fatigue, transient diffuse musculoskeletal pain and defects in cognition, memory, focus, and ability to multitask as well as other conditions or symptoms that involve neuroinflammation, associated with post-Lyme syndrome. Borrelia stimulates mast cells, which have recently emerged as master immunoregulatory cells that participate in allergies, mastocytosis, and mast cell activation, as well as other conditions or symptoms. Efforts to treat post-Lyme syndrome have proven futile. Intraocular immune globulin has been shown to improve polyneuropathies. Moreover, certain naturally occurring flavonoids with anti-inflammatory properties have been increasingly used in neurologic diseases including “brain fog.” Luteolin inhibits mast cells and microglia. Luteolin is safe.

In fact, a different luteolin-containing formulation (NeuroProtek) was recently shown to improve communication and sociability in children with autism. Interestingly, luteolin also improves cognition and memory in animal models.

Sincerely,

[Your Name]
AUTHOR DISCLOSURE INFORMATION

T.C.T. is the developer of BrainGain and NeuroProtek, which have been trademarked in the United States. He has also been awarded US patent no. 8,268,365—“Anti-inflammatory compositions for treating brain inflammation.” The authors declare they have no other competing interests.

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REFERENCES


